

Nomination Received by Council on Environmental Quality, Executive Office of the President
For the CEQ NEPA Pilot Project Program
<http://www.whitehouse.gov/administration/eop/ceq/initiatives/nepa/nepa-pilot-project-nominations>

PART I. NOMINATOR

First Name:	Aaron
Last Name:	Wernham
Organization:	The Pew Charitable Trusts
Project Title:	[None Submitted]
Submitted by:	Member of the Public
Date Received:	06/15/2011

PART II. SHORT ANSWERS

I. What Federal agency or agencies will be involved in this pilot project?

The Bureau of Land Management (BLM), Alaska was the lead agency. There were no federal cooperating agencies.

II. What is the Federal action to which this NEPA pilot project applies?

This pilot applies to a public health impact analysis undertaken to inform BLM’s planning process for oil and gas leasing in Alaska’s National Petroleum Reserve. Specifically, the pilot applies to the Northeast National Petroleum Reserve-Alaska (NPR-A) Supplemental Integrated Activity Plan/Environmental Impact Statement (IAP/EIS), a land use plan for 4.6 million acres on Alaska’s North Slope. The Bureau of Land Management (BLM), which manages the nearly 23-million-acre NPR-A, undertook the Supplemental IAP/EIS starting in late 2006 and concluding with a record of decision issued in July 2008. The North Slope Borough, the county-level government for Alaska’s North Slope, in its role as a cooperating agency for the IAP/EIS, contributed an analysis of the existing public health status of communities in the planning area and the potential impacts of the alternatives considered in the plan. The public health analysis approach in this pilot project can serve as a model for future consideration of public health impacts from federal actions through the NEPA process. Indeed, the BLM in Alaska is modeling its analysis in a current IAP/EIS for all of NPR-A on the analysis contained in the Northeast NPR-A Supplemental IAP/EIS.

III. How will this pilot project reduce the costs and time needed to complete the NEPA process?

The pilot project has the potential to reduce costs and time to complete a satisfactory NEPA process through bringing additional expertise to bear on substantive concerns, improving the quality of the NEPA product, and fostering wider acceptance and ownership of the final outcome by stakeholders. Many federal agencies complying with NEPA lack public health expertise. Involvement of local, state or tribal health officials as cooperating agencies or through other avenues such as contracts can allow the lead agency to more fully address any substantive concerns that relate to public health. In this way, including public health analysis can also reduce the legal risk entailed in a controversial NEPA process. A more thorough analysis, even if it has the potential to add to initial NEPA costs, leaves fewer potential vulnerabilities upon which plaintiffs might base legal action and thus lowers the chance that court decisions will require

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additional analysis and delay. The participation of public health authorities also affords access to public health data and statistics that would not otherwise be available, minimizing any potential delays or costs that could be posed by incomplete and unavailable information. Finally, health authorities are often viewed by communities as credible, unbiased sources of information. Their involvement in a controversial NEPA process may help build trust between the lead agency and the community and more effectively resolve any conflicts that arise.

IV. How will this pilot project ensure rigorous environmental protection?

This pilot involved an in-depth assessment of the potential public health impacts of BLM's proposed action and alternatives and proposed mitigation measures to address the health impacts identified. A robust, systematic analysis of public health is essential to fulfilling NEPA's purpose and ensuring rigorous protection of the environment because human communities are a part of the environment. NEPA's primary purpose is to promote a "productive harmony" between the environment and human communities (Sec. 2), and the act directed that agencies consider how federal actions will affect the quality of the "human environment." The CEQ defines "human environment" as the "natural and physical environment and the relationship of people with that environment (40 CFR § 1508.14).

Furthermore, CEQ defines the effects that must be analyzed under NEPA as including "ecological ..., aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative." Reviews of NEPA practice suggest that public health effects are not usually assessed systematically. Moreover, health experts and local, state, tribal and federal health officials are seldom included on the analytic team. EISs and EAs do not generally include a description of the affected environment for public health (i.e. a description of the baseline health status of the affected population). While it is common for agencies to identify effects that may have implications for health—such as changes in air quality or traffic flow—it is rare for agencies to specifically identify potential direct, indirect and cumulative health effects in a systematic manner. Finally, public health mitigation measures are rarely identified or analyzed. Incorporating public health considerations into an EIS or EA may also point the way to alternatives and mitigation measures that not only provide enhanced protection for human communities, but also protect the natural or physical environment. One such example from this pilot is a new mitigation measure incorporated into the ROD to monitor and reduce the risk of discharged contaminants entering the local food supply will also protect water quality and fish and game in NPR-A.

V. How will this pilot project improve the quality and transparency of agency decisionmaking?

"The benefits of oil development are clear. I don't deny that for a moment. The negative impacts are more subtle. They're also more widespread and more costly than most people realize. We know the human impacts of development are significant and long-term. So far, we've been left to deal with them on our own. They show up in our health statistics, alcohol treatment programs, emergency service needs, police responses—you name it."

-George Ahmaogak, North Slope Borough Mayor, at Alaska Forum on the Environment 2004.

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As exemplified by this quote, health issues may be a prominent concern for communities affected by a federal decision. In the case of this pilot, BLM noted that members of the public and local and tribal officials had raised a range of questions about health effects during scoping and in prior BLM decisions on oil and gas development in the region. By ensuring that there was adequate public health expertise on the analytic team and completing a systematic analysis, BLM was able to identify potential health effects and inform the public and responsible officials within BLM and the Department of the Interior.

This analysis allowed BLM and the Borough to develop mitigation measures to address impacts including: airborne emissions near local villages; the potential for contamination of fish and game that the community relies on for food; and anxiety created by large-scale influx of non-resident workers to previously isolated Alaska Native villages. In addition, the BLM adopted a measure creating a standard for consultation on public health between BLM and appropriate health officials at the local, state and tribal level for subsequent agency decisions in NPR-A. Federal actions outside the health sector can have important implications for health that, without including public health analysis in the EIS may not be identified during the planning and decision-making process, disclosed to the public, or factored into the final decision. Often, public concerns expressed in comments within the NEPA process relate to health and wellbeing. The analysis of these effects helps ensure that substantive public concerns are fully considered and addressed, even if they are not ultimately substantiated; that the public and agency decision makers are fully informed regarding potential risks and benefits; and where feasible, that agency decisions incorporate appropriate actions to address any significant impacts identified.

VI. Will this pilot project develop best practices that can be replicated by other agencies or applied to other Federal actions or programs? Please describe?

There are two best practices exemplified by this pilot. First, the pilot applies the emerging field of “health impact assessment”(HIA)—increasingly common in international environmental impact assessment(EIA) practice—to the Northeast NPR-A Supplemental IAP/EIS. The analysis of public health effects in NEPA is inconsistent and often narrow, as described in the pilot narrative below. Yet NEPA refers to health six times; CEQ’s regulations on implementing NEPA define health as one of the effects that must be considered in an EIS (40 CFR § 1508.8) and agencies are directed to consider the “degree to which the proposed action affects public health and safety” in determining significance (40 CFR §1508.27); more generally, agencies are obligated to respond to all substantive issues raised by stakeholders. Although CEQ regulations do not refer specifically to “HIA,” the steps and approach of HIA are equivalent to the NEPA process, and BLM found this approach to be compatible with NEPA. Based on this pilot and subsequent projects, as described in the narrative below, it appears that HIA may be a practical and robust way for agencies to better implement NEPA’s intent and requirements with regard to health. Second, many federal agencies lack staff with health expertise and would not be able to undertake an HIA without consultation with outside agencies or experts. Local, state, tribal and federal health departments have health expertise, in-depth knowledge of the health status and vulnerabilities of local communities and access to a wide range of data that can improve the quality and completeness of a NEPA analysis. All jurisdictions in the United States are

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served by a local, state, tribal or federal health department. Most health officials are not experienced with NEPA, but this pilot suggests that through an effective collaboration during an EIS, health officials can develop enough knowledge to allow them to make valuable contributions to the analysis.

PART III. PROJECT DESCRIPTION

(See attachment on following page.)

What Federal agency or agencies will be involved in this pilot project?(1500)

The Bureau of Land Management (BLM), Alaska was the lead agency. There were no federal cooperating agencies.

What is the Federal action to which this NEPA pilot project applies? (1500)

This pilot applies to a public health impact analysis undertaken to inform BLM's planning process for oil and gas leasing in Alaska's National Petroleum Reserve. Specifically, the pilot applies to the Northeast National Petroleum Reserve-Alaska (NPR-A) Supplemental Integrated Activity Plan/Environmental Impact Statement (IAP/EIS), a land use plan for 4.6 million acres on Alaska's North Slope. The Bureau of Land Management (BLM), which manages the nearly 23-million-acre NPR-A, undertook the Supplemental IAP/EIS starting in late 2006 and concluding with a record of decision issued in July 2008. The North Slope Borough, the county-level government for Alaska's North Slope, in its role as a cooperating agency for the IAP/EIS, contributed an analysis of the existing public health status of communities in the planning area and the potential impacts of the alternatives considered in the plan. The public health analysis approach in this pilot project can serve as a model for future consideration of public health impacts from federal actions through the NEPA process. Indeed, the BLM in Alaska is modeling its analysis in a current IAP/EIS for all of NPR-A on the analysis contained in the Northeast NPR-A Supplemental IAP/EIS.

How will this pilot project reduce the costs and time needed to complete the NEPA process? (2500)

The pilot project has the potential to reduce costs and time to complete a satisfactory NEPA process through bringing additional expertise to bear on substantive concerns, improving the quality of the NEPA product, and fostering wider acceptance and ownership of the final outcome by stakeholders. Many federal agencies complying with NEPA lack public health expertise. Involvement of local, state or tribal health officials as cooperating agencies or through other avenues such as contracts can allow the lead agency to more fully address any substantive concerns that relate to public health. In this way, including public health analysis can also reduce the legal risk entailed in a controversial NEPA process. A more thorough analysis, even if it has the potential to add to initial NEPA costs, leaves fewer potential vulnerabilities upon which plaintiffs might base legal action and thus lowers the chance that court decisions will require additional analysis and delay. The participation of public health authorities also affords access to public health data and statistics that would not otherwise be available, minimizing any potential delays or costs that could be posed by incomplete and unavailable information. Finally, health authorities are often viewed by communities as credible, unbiased sources of information. Their involvement in a controversial NEPA process may help build trust between the lead agency and the community and more effectively resolve any conflicts that arise.

How will this pilot project ensure rigorous environmental protection? (2500)

This pilot involved an in-depth assessment of the potential public health impacts of BLM's proposed action and alternatives and proposed mitigation measures to address the health impacts identified.

A robust, systematic analysis of public health is essential to fulfilling NEPA's purpose and ensuring rigorous protection of the environment because human communities are a part of the environment. NEPA's primary purpose is to promote a "productive harmony" between the environment and human communities (Sec. 2), and the act directed that agencies consider how federal actions will affect the quality of the "human environment." The CEQ defines "human environment" as the "natural and physical environment and the relationship of people with that environment (40 CFR § 1508.14). Furthermore, CEQ defines the effects that must be analyzed under NEPA as including "ecological ..., aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative."

Reviews of NEPA practice suggest that public health effects are not usually assessed systematically. Moreover, health experts and local, state, tribal and federal health officials are seldom included on the analytic team. EISs and EAs do not generally include a description of the affected environment for public health (i.e. a description of the baseline health status of the affected population). While it is common for agencies to identify effects that may have implications for health—such as changes in air quality or traffic flow—it is rare for agencies to specifically identify potential direct, indirect and cumulative health effects in a systematic manner. Finally, public health mitigation measures are rarely identified or analyzed.

Incorporating public health considerations into an EIS or EA may also point the way to alternatives and mitigation measures that not only provide enhanced protection for human communities, but also protect the natural or physical environment. One such example from this pilot is a new mitigation measure incorporated into the ROD to monitor and reduce the risk of discharged contaminants entering the local food supply will also protect water quality and fish and game in NPR-A.

How will this pilot project improve the quality and transparency of agency decisionmaking? (2500)

Quote from the North Slope Borough Mayor: "The benefits of oil development are clear. I don't deny that for a moment. The negative impacts are more subtle. They're also more widespread and more costly than most people realize. We know the human impacts of development are significant and long-term. So far, we've been left to deal with them on our own. They show up in our health statistics, alcohol treatment programs, emergency service needs, police responses—you name it."

-George Ahmaogak, Mayor of North Slope Borough. Alaska Forum on the Environment 2004.

As exemplified by this quote, health issues may be a prominent concern for communities affected by a federal decision. In the case of this pilot, BLM noted that members of the public and local and tribal officials had raised a range of questions about health effects during scoping and in prior BLM decisions on oil and gas development in the region. By ensuring that there was adequate public health expertise on the analytic team and completing a systematic analysis, BLM was able to identify potential health effects and inform the public and responsible officials within BLM and the Department of the Interior.

This analysis allowed BLM and the Borough to develop mitigation measures to address impacts including: airborne emissions near local villages; the potential for contamination of fish and game that the community relies on for food; and anxiety created by large-scale influx of non-resident workers to previously isolated Alaska Native villages. In addition, the BLM adopted a measure creating a standard for consultation on public health between BLM and appropriate health officials at the local, state and tribal level for subsequent agency decisions in NPR-A.

Federal actions outside the health sector can have important implications for health that, without including public health analysis in the EIS may not be identified during the planning and decision-making process, disclosed to the public, or factored into the final decision. Often, public concerns expressed in comments within the NEPA process relate to health and wellbeing. The analysis of these effects helps ensure that substantive public concerns are fully considered and addressed, even if they are not ultimately substantiated; that the public and agency decision makers are fully informed regarding potential risks and benefits; and where feasible, that agency decisions incorporate appropriate actions to address any significant impacts identified.

Will this pilot project develop best practices that can be replicated by other agencies or applied to other Federal actions or programs? Please describe. (2500)

There are two best practices exemplified by this pilot.

First, the pilot applies the emerging field of “health impact assessment” (HIA)—increasingly common in international environmental impact assessment (EIA) practice—to the Northeast NPR-A Supplemental IAP/EIS.

The analysis of public health effects in NEPA is inconsistent and often narrow, as described in the pilot narrative below. Yet NEPA refers to health six times; CEQ’s regulations on implementing NEPA define health as one of the effects that must be considered in an EIS (40 CFR § 1508.8) and agencies are directed to consider the “degree to which the proposed action affects public health and safety” in determining significance (40 CFR §1508.27); more generally, agencies are obligated to respond to all substantive issues raised by stakeholders. Although CEQ regulations do not refer specifically to “HIA,” the steps and approach of HIA are equivalent to the NEPA process, and BLM found this approach to be compatible with NEPA. Based on this pilot and subsequent projects, as described in the narrative below, it appears that HIA may be a practical and robust way for agencies to better implement NEPA’s intent and requirements with regard to health.

Second, many federal agencies lack staff with health expertise and would not be able to undertake an HIA without consultation with outside agencies or experts. Local, state, tribal and federal health departments have health expertise, in-depth knowledge of the health status and vulnerabilities of local communities and access to a wide range of data that can improve the quality and completeness of a NEPA analysis. All jurisdictions in the United States are served by a local, state, tribal or federal health department. Most health officials are not experienced with NEPA, but this pilot suggests that through an effective collaboration during an EIS, health officials can develop enough knowledge to allow them to make valuable contributions to the analysis.

Please submit, via attachment, a 500- to 750-word narrative describing the NEPA pilot program you would like to nominate. The narrative should address the following:

- Describe the pilot project. What agency or agencies, geographic area, and natural resource management issues will be involved?
- How will the pilot project be implemented?
- Are you nominating a pilot project that has already been implemented, is currently being implemented, or is proposed for implementation?
- If your pilot project is underway or is proposed for implementation, describe the timeline for implementation: When would the project start? When would it be completed? Describe any major intermediate milestones for implementation.
- Describe the resources that will be needed to implement the pilot project.
- Will the pilot project further an Administration priority?

The narrative can elaborate on, but should not repeat, your responses to the Short Answers (Part II) showing how your project meets selection criteria for the CEQ NEPA Pilots Project.

Begin Narrative:

The analysis of public health effects in NEPA is inconsistent and often narrow.¹ Agencies sometimes undertake a risk assessment for a specific contaminant exposure (such as the cancer risk of exposure to diesel air toxics). NEPA documents often describe effects important to health, such as changes in air or water quality, economy, or traffic volume; however, they rarely systematically identify and assess direct, indirect and cumulative health effects, describe the baseline health status of the affected population, or propose mitigation for public health. Given the range of federal decisions subject to NEPA, this represents a substantial missed opportunity to protect and improve the health of Americans.

This pilot involves a health analysis undertaken as part of the BLM's supplemental IAP/EIS for proposed changes to its land use plan for the Northeast National Petroleum Reserve-Alaska (NPR-A). There are two innovations explored in this pilot: the systematic assessment and mitigation of potential health effects and the inclusion of a local health department as a cooperating agency.

North Slope Borough residents voiced a range of health concerns regarding oil and gas development in the Northeast NPR-A region, such as the possibility that local fish and game could be displaced or contaminated, which could jeopardize the food supply; challenges related to the influx of non-resident personnel, such as illicit importation of alcohol (banned in North

¹ Steinemann A. Rethinking human health impact assessment. *Environmental Impact Assessment Review*. 2000;20(6):627-45.

Bhatia R, Wernham A. Integrating human health into environmental impact assessment: an unrealized opportunity for environmental health and justice. *Environmental Health Perspectives*. 2008;116:991-1000.

Slope villages) and exposure to sexually transmitted infections; the risk that pollution sources near the villages could exacerbate already high rates of lung disease.

The North Slope Borough, a local government encompassing eight remote, primarily Alaska Native villages, became a cooperating agency. The Borough's health department contributed subsections on public health for the EIS, including a "description of the affected environment" for public health and an analysis of the direct, indirect and cumulative health consequences of the alternatives. The Borough and BLM developed potential mitigation measures to address the health effects identified; several were adopted in the ROD (see Section II).

The Borough and BLM relied on the emerging field of health impact assessment (HIA). HIA is increasingly common internationally as a part of "environmental, social and health impact assessment," or ESHIA. Oil and gas and mining corporations (e.g., Shell and Chevron) now commonly use ESHIA. Trade groups such as the International Council on Mining and Metals and the International Association of Oil and Gas Producers have developed guidelines for HIA. HIA is now required as part of the loan evaluation process for the World Bank, International Finance Corporation and other lenders. Many nations—including Thailand, Australia, Canada and some European countries have developed rules or guidance for HIA.

Although NEPA and the CEQ's regulations clearly convey a requirement to address effects on public health (see brief questions above), they do not refer specifically to "HIA." However, the steps and analytic approach in HIA are equivalent to the NEPA process, and BLM found HIA to be compatible with NEPA.

The Obama Administration has stated that all executive branch agencies must be involved in efforts to improve the health status of Americans. Interdisciplinary actions are a high priority, as exemplified by Executive Order 13544, which created a cabinet-level, cross-agency National Prevention Council charged with "coordination and leadership at the Federal level, and among all executive departments and agencies, with respect to prevention, wellness, and health promotion practices." This pilot project furthers the Administration's objectives by demonstrating an approach that allows non-health agencies to take concrete steps to identify and address the health consequences of their actions.

This pilot has had a substantial impact on NEPA practice in Alaska and the experience in that state suggests that HIA may be a practicable and useful tool across a wide range of NEPA-based federal actions. As a result of work begun in this pilot, the Environmental Protection Agency and Minerals Management Service integrated HIA into several EISs through cooperating agency relationships or contracts with tribal health departments. The state of Alaska's "large project permitting team" now includes the Alaska Department of Health as a cooperating agency on any project-level EIS: the department is currently involved in eight separate NEPA-based health analyses. A working group involving several federal, tribal and state agencies convened to develop voluntary guidance for HIA in Alaska. Agencies outside Alaska have also begun to use HIA, for example in [transportation corridor planning](#) and [port expansion](#).

This pilot demonstrates the value and feasibility of including health experts and a systematic health analysis in the NEPA process when indicated.

This report was completed in collaboration with BLM's Alaska Office.

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